

GPS Worksheet

ENTER YOUR AIRPORT'S DATA HERE		CHOOSE WHICH MINIMA YOU WOULD LIKE TO PLAN FOR FROM ONE OF THESE THREE CHOICES				DETERMINE WHAT IMPROVEMENTS NEED TO BE MADE	CALCULATE HOW MUCH IT WILL COST
Airport:							
Airport Reference Code	Current:					5-Year Forecast:	
Item	Existing Infrastructure	Precision : Approach Minimums < 3/4 Mile	NP ¹ w/ Vertical Guidance: Approach Minimums < 3/4 Mile	Nonprecision: Approach Minimums ≥ 1 Mile		Additional Need	Cost of Upgrade
Aircraft Approach Category ²		A & B					
Airplane Design Group ³		I & II		I	II		
Runway Length		4200' (paved)		3200' (paved)			
Runway Width		100'		60'	75'		
Runway Marking		Precision		Nonprecision ⁴			
Runway Safety Area							
Length		600'		240'	300'		
Width		300'		120'	150'		
Runway Protection Zone							
Acres		78.914 acres		48.978 acres			
Obstacle Free Zone							
Length		200'					
Width		400'					
Runway Object Free Area							
Length		600'		240'	300'		
Width		800'		400'	500'		
Precision Object Free Area							
Length		200'		NA			
Width		800'		NA			
Runway Edge Lights ⁵		HIRL/MIRL		MIRL/LIRL			
Runway Centerline to:							
Taxiway Centerline		250'	300'	225'	240'		
Aircraft Parking		400'		200'	250'		
Parallel Taxiway ⁶		REQUIRED		RECOMMENDED			
Taxiway Width		25'	35'	25'	35'		
Approach Lights		MALSR, SSALR, or ALSF		RECOMMENDED			
Meets Threshold Siting Criteria ⁷		Approach Category E		Approach Category D			
Approach Surface		34:1 CLEAR		20:1 CLEAR or Penetrations Lighted for Night Minimums			
Current Survey		OC, or ANA ⁸ Precision PT 77	OC, or ANA ⁸ Nonprecision PT 77				
TOTAL							

NOTES:

1. NP stands for Nonprecision.
2. Aircraft Approach Category refers to a grouping of aircraft based on 1.3 times their stall speed in their landing configuration at maximum certificated landing weight.
Category A: speeds less than 91 knots. Category B: speed 91 knots or more but less than 121 knots.
3. Airplane Design Group refers to a grouping of airplanes based on wingspan. Group I: up to but not including 49 feet. Group II: 49 feet up to but not including 79 feet.
4. Nonprecision runway markings are required for approach minimums equal to 1 mile. Visual (Basic) runway markings are required for approach minimums greater than 1 mile.
5. Runway edge lighting is required for night minimums. High intensity lights (HIRLs) are required for RVR-based minimums.
6. A parallel taxiway must lead to the runway threshold and, with airplanes on centerline, keep the airplanes outside the OFZ.
7. Refer to Advisory Circular 150/5300-13 Change 6; Appendix 2, Figure A2-1. Circling procedures to a secondary runway from the primary approach will not be authorized when the secondary runway does not meet threshold siting criteria (reference Advisory Circular 150/5300-13 Change 6; Appendix 2), OFZ criteria (reference Advisory Circular 150/5300-13 Change 6; paragraph 306), and TERPS paragraph 251 criteria.
8. OC stands for Obstruction Chart. ANA stands for Area Navigation Approach.